

CumBERland Co 26-02

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Division of Waste Management

Michael F. Easley, Governor  
William G. Ross Jr., Secretary  
William L. Meyer, Director

May 21, 2001

Commander  
XVIII ABN Corps & Fort Bragg  
AFZA-PW  
Fort Bragg, North Carolina 28310

SUBJECT: Closure of the Fort Bragg-Longstreet Road MSW Landfill Unit.  
**FACILITY PERMIT #: 26-02**

Dear Colonel Shirron:

The Solid Waste Section (the Section) has received and reviewed documentation submitted by KCI Technologies, Inc.(KCI) on your behalf regarding the subject facility. Based on this documentation, report dated 12 April 2000(certified 13 April 2000) and as-built drawings received 1 May 2000, the Section has determined that the unlined MSW unit at the subject facility has been closed in accordance with the applicable requirements of the Rules, Transition Plan and alternative cap demonstration approval. This determination may be rescinded should any of the documentation prove to be inaccurate.

The unlined MSW unit at the subject facility is considered closed subject to the following post closure conditions on the following pages. The owner and/or operator of the facility, FORT BRAGG, is responsible for compliance with these conditions. Condition(s) 12 thru 16 address continued water quality monitoring for the existing ground water monitoring system at the facility.

Please note, that the 30 year post-closure period is effective starting on 3 AUGUST 1999, as stated by the certifying engineer that the final cap was completed on said date. Also note that this closure letter and Post Closure conditions must be recorded in accordance with condition #6 and a copy of this recorded document returned to the Solid Waste Section at:

DIVISION OF WASTE MANAGEMENT  
SOLID WASTE SECTION  
1646 MAIL SERVICE CENTER  
RALEIGH, NORTH CAROLINA 27699-1646  
ATTN: James C. Coffey

1646 Mail Service Center, Raleigh, North Carolina 27699-1646

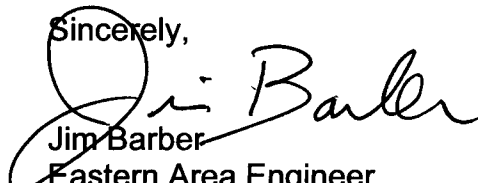
Phone: 919 -733-0692 \ FAX: 919-733-4810\ Internet: [www.enr.state.nc.us/](http://www.enr.state.nc.us/)  
AN EQUAL OPPORTUNITY \ AFFIRMATIVE ACTION EMPLOYER - 50% RECYCLED / 10% POST CONSUMER PAPER

Colonel Shirron  
Page 2  
May 21, 2001

The entire closure letter, pages 1 thru 13, should be recorded against the appropriate deed/description of property that the Fort Bragg - Longstreet Landfill facility occupies. Enclosed is a copy of the original permit issue to Fort Bragg on 11 February 1981, along with a legal description and coordinates for the site.-

If you have any questions concerning this closure letter don't hesitate to call Jim Barber at (919) 733-0692 Extension: 344 or Jim Coffey at Extension: 255.

Sincerely,

  
Jim Barber  
Eastern Area Engineer  
Solid Waste Section

cc: Jim Coffey  
Mark Fry  
Ikie Guyton  
Mark Poindexter  
Raleigh Central File: FORT BRAGG: Permit #26-02 (CUMBERLAND)

Mail:

49035

Commander

XVIII Abn Corps + Fort Bragg

AFZA - PW - C (Whitley)

Fort Bragg, NC 28310

FACILITY PERMIT NO: 26-02

Closure of MSWLF Unit

Date: 21 MAY 2001


RECEIVED

11-14-2001 AM 11:28:16

GEORGE E. TATUM  
REGISTER OF DEEDS  
CUMBERLAND CO., N.C.**MUNICIPAL SOLID WASTE LANDFILL  
FACILITY****LETTER OF CLOSURE****THE DEPARTMENT OF THE ARMY - FORT BRAGG**

is hereby issued a  
LETTER OF CLOSURE  
for the FORT BRAGG UNLINED MSWLF Unit  
within the MUNICIPAL SOLID WASTE LANDFILL FACILITY

located off of Longstreet Road, Fort Bragg, Cumberland County, North Carolina in  
accordance with Article 9, Chapter 130A, of the General Statutes of North Carolina and  
all rules promulgated thereunder and subject to the conditions set forth in this letter of  
closure.

  
James C. Coffey, Head  
Permitting Branch  
Solid Waste Section**RECEIVED**

DEC 3 2001

DIVISION OF WASTE MANAGEMENT  
FAYETTEVILLE REGIONAL OFFICE

28'

~~FT. BRAGG~~ **POST-CLOSURE CONDITIONS**  
~~MONTGOMERY~~ **MUNICIPAL SOLID WASTE LANDFILL**

**GENERAL CONDITIONS:**

- (1) The owner or operator shall conduct post-closure care, to include groundwater monitoring, for 30 years commencing with the closure date of 3 AUGUST 1999, as indicated by letter dated 12 APRIL 2000 from James W. Blake in accordance with the Section .1600 rules, except as provided under Rule .1627(d)(2).
- (2) The owner or operator shall maintain the integrity and effectiveness of any cap system, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the cap system.
- (3) The owner or operator shall maintain and operate the leachate collection system in accordance with the requirements in Rules .1624 and .1626. The Division may allow the owner or operator to stop managing leachate if the owner or operator demonstrates that leachate no longer poses a threat to human health and the environment.
- (4) The owner or operator shall maintain and operate the gas monitoring system to ensure that:
  - (a) The concentration of methane gas generated by the facility does not exceed 25 percent of the lower explosive limit for methane in facility structures (excluding gas control or recovery system components); and
  - (b) The concentration of methane gas does not exceed the lower explosive limit for methane at the facility property boundary.

If methane gas levels exceeding these limits are detected, the owner or operator must take all steps required in Rule .1626(4)(c)

- (5) The owner or operator shall ensure that the MSWLF units do not violate any applicable requirements developed under a State Implementation Plan (SIP) approved or promulgated by the U.S. EPA Administrator pursuant to Section 110 of the Clean Air Act, as amended.

Post-Closure Conditions  
Page 6

**RECORDATION:**

- (6) Rule .1627(c)(8) requires that, following closure of the MSWLF unit, the owner or operator record a notation on the deed to the landfill facility property, or some other instrument that is normally examined during title search, and notify the Division that the notation has been recorded and a copy has been placed in the operating record. The notation on the deed shall in perpetuity notify any potential purchaser of the property that:

- (a) The land has been used as a landfill facility; and
- (b) Its use is restricted under the closure plan approved by the Division.

The attached certified copy of the closure letter shall be recorded by the Register of Deeds and indexed in the grantor index under the name of the land owner. The certified copy affixed with the Register's seal and the date, book, and page number of the recording shall be returned to the Solid Waste Section.

**FINANCIAL ASSURANCE:**

- (7) The owner or operator must provide continuous coverage for post-closure care in accordance with .1628(e) until released from financial assurance requirements for post-closure care by demonstrating compliance with Rule .1627(d). FORT BRAGG IS EXEMPT FROM THIS REQUIREMENT PURSUANT TO .1628(a)(1).
- (8) The owner or operator shall annually adjust the post-closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s). For owners and operators using the local government financial test, the post-closure cost estimate shall be updated for inflation within 30 days after the close of the local government's fiscal year and before submission of updated information to the Division.
- (a) The owner or operator shall increase the post-closure care cost estimate and the amount of financial assurance provided under .1628(c)(2), if changes in the post-closure plan or MSWLF unit conditions increase the maximum costs of post-closure care.
  - (b) The owner or operator may reduce the post-closure cost estimate and the amount of financial assurance provided under 1628(c)(2), if the cost estimate exceeds the maximum costs of post-closure care remaining over the post-closure care period. Prior to any reduction of the post-closure cost estimate by the owner or operator, a written justification for the reduction shall be submitted to the Division. No reduction of the post-closure cost estimate shall be allowed without Division approval. The reduction justification and the Division approval shall be placed in the MSWLF's operating record.

Post-Closure Conditions  
Page 7

**POST CLOSURE USES:**

- (9) Post-closure use of the property shall not disturb the integrity of the cap system, base liner system, or any other components of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements in Section .1600. The Division may approve any other disturbance if the owner or operator demonstrates that disturbance of the cap system, base liner system, or other component of the containment system, including any removal of waste, will not increase the potential threat to human health or the environment.
- A. The request to use the Fort Bragg MSWLF unit as a "skeet range fall zone" is not approved as per request dated 8 April 1999, received 15 April 1999.

**COMPLETION OF THE POST-CLOSURE CARE PERIOD:**

- (10) Following completion of the post-closure care period for each MSWLF unit, the owner or operator shall notify the Division that a certification, signed by a registered professional engineer, verifying that post-closure care has been completed in accordance with the post-closure plan, has been placed in the operating record.

**ONGOING SOLID WASTE MANAGEMENT ACTIVITIES:**

- (11) Continuing solid waste management activities within the MSWLF facility shall be conducted in accordance with all pertinent requirements and permit conditions and shall not violate any post-closure conditions. Any new solid waste activities must be approved by the Solid Waste Section and included as part of the comprehensive Facility Plan.

**GROUND WATER MONITORING CONDITIONS:**

- (12) In accordance with .1630(c), once established at a MSWLF unit, ground-water monitoring shall be conducted throughout the post-closure care period for the MSWLF unit in accordance with the requirements of Rules .1631 through .1637. Monitoring of the surface water shall be in accordance with the requirements of Rule .0602.
- (13) Detection monitoring is required at MSWLF units at all ground-water monitoring wells that are part of the detection monitoring system as established in the approved monitoring plan. At a minimum, the detection monitoring program shall include monitoring for the constituents listed in Appendix I of 40 CFR Part 258.

Post-Closure Conditions  
Page 8

- (14) The monitoring frequency for all Appendix I detection monitoring constituents shall be at least semiannual during the post-closure period. At least one sample from each well (background and down gradient) shall be collected and analyzed during semiannual sampling events.
- (15) If the owner or operator determines that there is a statistically significant increase over background for one or more of the constituents listed in Appendix I or whenever a violation of the North Carolina ground-water quality standards (15A NCAC 2L .0202) has occurred at any monitoring well, the owner or operator:
- (a) Shall within 14 days of this finding, report to the Division and place a notice in the operating record indicating which constituents have shown statistically significant changes from background levels.
  - (b) Shall within 90 days of this finding, establish an assessment monitoring program in accordance with Rule .1634 except as provided for in Rule .1633(c)(3).
  - © Shall within 90 days of finding that any of the constituents listed in Appendix II have been detected at a statistically significant level exceeding the ground-water protection standards, initiate an assessment of corrective action measures in accordance with Rule .1635.
  - (d) Shall select based on the results of the corrective measures assessment, a remedy that, at a minimum, meets the standards listed in Rule.1636(b). Within 14 days of selecting a remedy, the permittee shall submit an application to modify the permit describing the selected remedy to the Division for evaluation and approval. The application shall be subject to the processing requirements set forth in Rule .1604 © of this Section. The application shall include the demonstrations necessary to comply with the financial assurance requirements set forth in Paragraph (d) of Rule .1628.
  - (e) Shall, based on the approved schedule for initiation and completion of remedial activities, establish and implement a corrective action ground-water monitoring program, implement the approved corrective action remedy; and take any interim measures necessary to ensure the protection of human health and the environment in accordance with Rule .1637.
- (16) The ground-water monitoring program shall include consistent sampling and analysis procedures in accordance with Rule .1632 that are designed to ensure monitoring results that provide an accurate representation of ground-water quality at the background and down gradient wells.



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DEC 3 2001

DIVISION OF WASTE MANAGEMENT  
FAYETTEVILLE REGIONAL OFFICE

## CERTIFIED COPY OF CLOSURE LETTER

I do hereby certify that the attached CLOSURE LETTER is an exact and true copy of the closure letter for the Fort Bragg Municipal Solid Waste Landfill Unit, Permit Number 26-02.

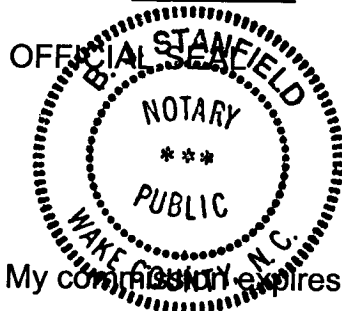
James C Coffey  
James C. Coffey, Supervisor  
Permitting Branch  
Solid Waste Section  
Division of Waste Management

Wake County, North Carolina

I, B.J. STANFIELD, Notary Public for said County and State, do hereby certify that JAMES C. COFFEY, of the Solid Waste Section, personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal,

this the 21 day of May, 2001



B.J. Stanfield  
NOTARY PUBLIC

My commission expires DECEMBER 29, 2004

**Note to Register of Deeds:** The certified copy of the closure letter shall be recorded by the Register of Deeds and indexed in the grantor index under the name of the land owner. The certified copy affixed with the Register's seal and the date, book, and page number of the recording shall be returned to James C. Coffey, Division of Waste Management, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

The foregoing Certificate(s) of B.J. Stanfield

is/are certified to be correct. This instrument and this certificate are duly registered at the date and time and in the Book and Page shown on the first page hereof.

By GEORGE E. TATUM REGISTER OF DEEDS FOR CUMBERLAND COUNTY,  
Deputy/Assistant - Register of Deeds



REPLY TO  
ATTENTION OF:

**DEPARTMENT OF THE ARMY**  
HEADQUARTERS, XVIII AIRBORNE CORPS AND FORT BRAGG  
FORT BRAGG, NORTH CAROLINA 28310

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DEC 3 2001

DIVISION OF WASTE MANAGEMENT  
FAYETTEVILLE REGIONAL OFFICE

Public Works Business Center

29 NOV 2001

Mr. Jim Barber  
North Carolina Department of Environment,  
Health and Natural Resources  
Division of Solid Waste  
225 Green Street, Suite 714  
Fayetteville, North Carolina 28303

Dear Mr. Barber:

Enclosed are xeroxed copies of the recorded plat and closure letter for Fort Bragg's sanitary landfill, permit number 26-02. This is to meet requirements of 15A NCAC 13B, .1627©(8)(A), which call for notation of the closed landfill on the deed or other instrument that is normally examined during title search.

This should complete the closure process, with the exception of the 30 year monitoring period that began August 3, 1999, required by 15A NCAC 13B, .1627(d).

The project manager is Mr. George Whitley, (910) 396-3702.

Sincerely,

*Gregory G. Bean*  
GREGORY G. BEAN  
Colonel, U.S. Army  
Director of Public Works  
Business Center

Enclosures

STATE OF NORTH CAROLINA  
DEPARTMENT OF HUMAN RESOURCES

Division of Health Services

P.O. Box 2091

Raleigh 27602

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DEC 8 2001

DIVISION OF WASTE MANAGEMENT  
FAYETTEVILLE REGIONAL OFFICESOLID WASTE MANAGEMENT  
PERMIT

THE DEPARTMENT OF THE ARMY

is hereby issued a permit to



operate a

SANITARY LANDFILL

located on U.S. Federal Government Property on the  
Fort Bragg Military Reservation in Cumberland County, in accordancewith Article 13B of the General Statutes of North Carolina and all rules promul-  
gated thereunder. The facility is located on the below described property.

Being a tract of land owned by the United States Federal Government located in North Carolina, Cumberland County, on the Fort Bragg Military Reservation and to the North of Longstreet Road, said tract being described by the following coordinates based on the North Carolina Coordinate System.

Beginning at the Northeastern corner of said tract N 1,985,469.28, E 508,595.36; thence with the Eastern margin of said tract N 1,985,799.26, E 506,674.62, the Southeast corner; thence with the Southern margin of said tract N 1,983,640.70, E 505,971.55, the Southwest corner; thence with the Western margin of said tract N 1,983,309.59, E 508,190.98, the Northwest corner; thence with the Northern margin to the beginning coordinates, containing 106.81 acres more or less.

  
\_\_\_\_\_  
Hugh H. Tilson, M.D.  
Director  
Division of Health Services  
\_\_\_\_\_  
O. W. Strickland, Head  
Solid & Hazardous Waste Management  
Branch  
Environmental Health Section

DESCRIPTION OF FORT BRAGG LANDFILL  
BY THE NORTH CAROLINA COORDINATE SYSTEM

Being a tract of land owned by the United States Federal Government located in North Carolina, Cumberland County, on the Fort Bragg Military Reservation and to the North of Longstreet Road, said tract being described by the following coordinates based on the North Carolina Coordinate System.

Beginning at the Northeastern corner of said tract N 1,985,469.28, E 508,595.36; thence with the Eastern margin of said tract N 1,985,799.26, E 506,674.62, the Southeast corner; thence with the Southern margin of said tract N 1,983,640.70, E 505,971.55, the Southwest corner; thence with the Western margin of said tract N 1,983,309.59, E 508,190.98, the Northwest corner; thence with the Northern margin to the beginning coordinates, containing 106.81 acres more or less.

ELDRIDGE R. BAREFOOT, JR.

*Eldridge R. Barefoot, Jr. L-2495*



Coordinates for Fort Bragg Landfill

(N.C.C.S. from U.T.M.)

1. N/E Corner	X = 1,985,469.28 Y = 508,595.36
2. S/E Corner	X = 1,985,799.26 Y = 506,674.62
3. S/W Corner	X = 1,983,640.70 Y = 505,971.55
4. N/W Corner	X = 1,983,309.59 Y = 508,190.98

This map is not a certified survey and has not been reviewed by a local government agency for compliance with any applicable land development regulations.

Landfill Site Selection Study No. 26-011-75/76, 27 May-10 Jun 75

LEGEND: (A) MONITORING POINT

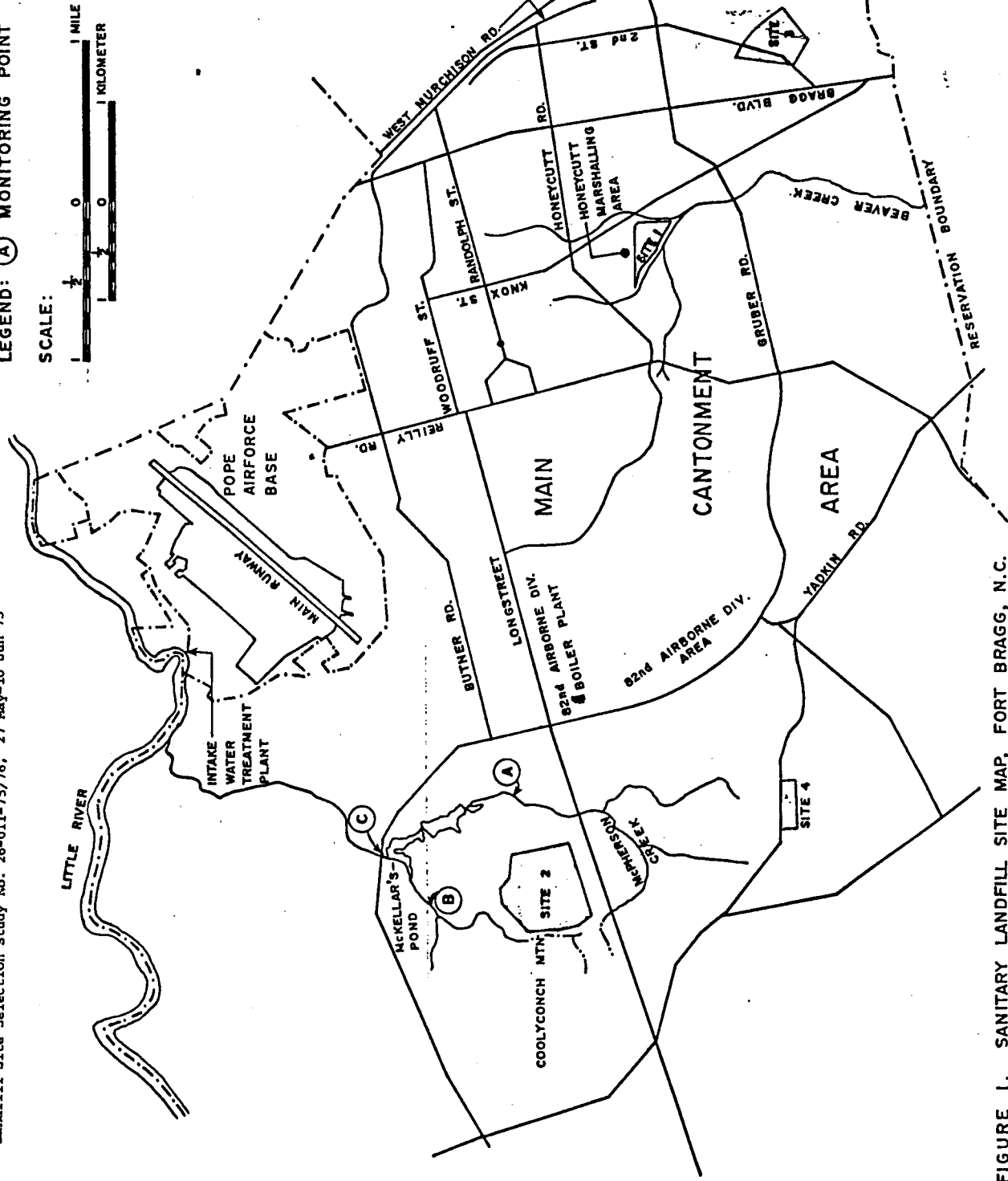
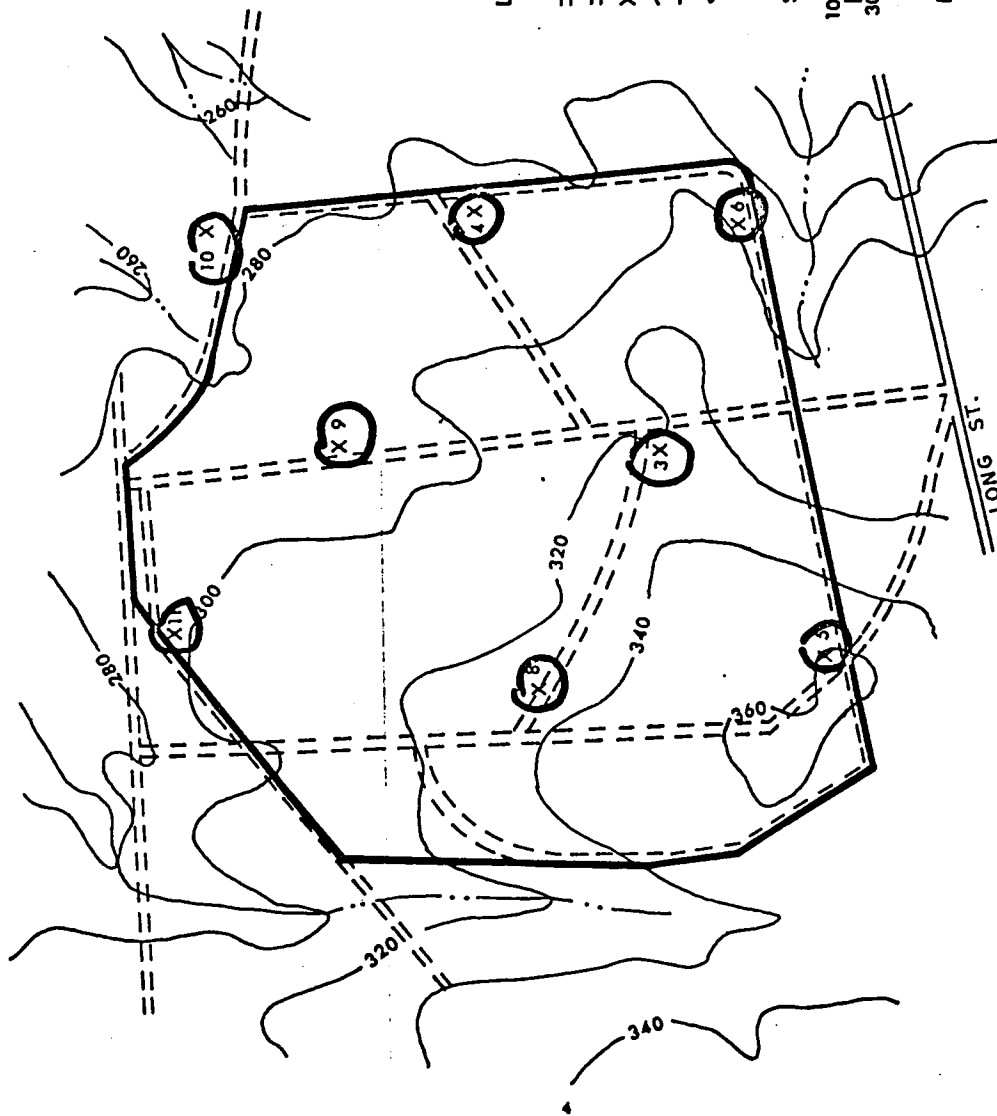


FIGURE 1. SANITARY LANDFILL SITE MAP, FORT BRAGG, N.C.

THIS MAP IS NOT A CERTIFIED SURVEY AND HAS NOT BEEN REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.

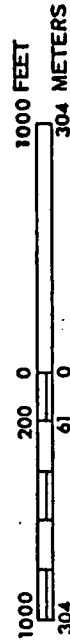


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LEGEND:

- == PAVED ROAD
- - - UNIMPROVED DIRT ROAD
- X 5 BORE HOLE LOCATION NUMBER
- 360- CONTOUR WITH ELEVATION IN FEET
- - - - - STREAM DRAINAGE
- SITE BOUNDARY

SCALE:



NOTE: CONTOUR INTERVAL 20 FEET  
DATUM IS MEAN SEA LEVEL

FIGURE 2. PROPOSED SANITARY LANDFILL SITE 2 FORT BRAGG, N.C.